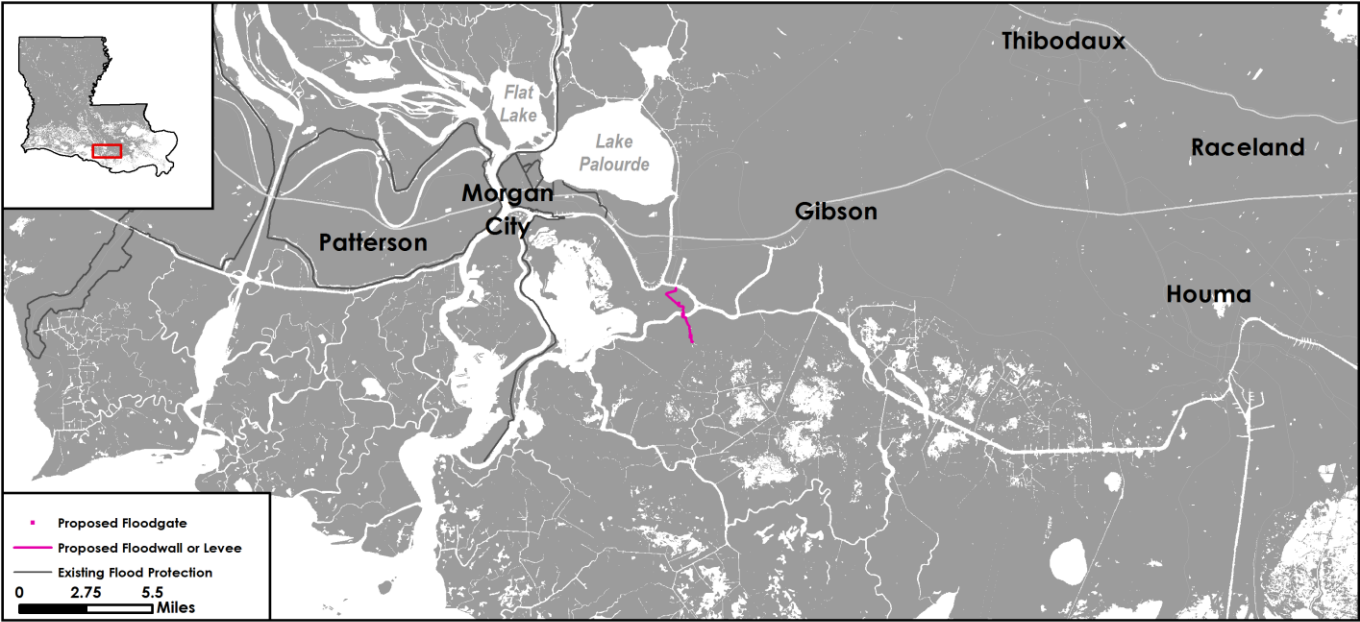


Bayou Chene Structural Protection

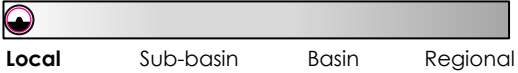
Project ID: 03b.HP.13



Description

Construction of a structure across Bayou Chene near Amelia.

Scale of Influence



Project Location

St. Mary Parish; Terrebonne Parish

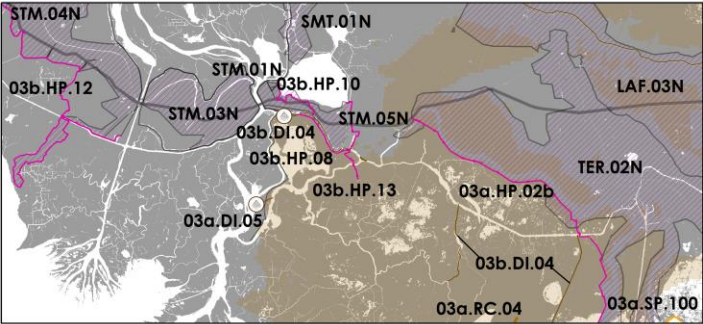
Project Duration

Planning, Engineering, and Design is estimated to take 3 years.
Construction is estimated to take 4 years.

Project Cost Estimate

	Estimated Cost
Planning/Engineering & Design	\$0
Construction	\$80,000,000
Operations & Maintenance	\$0
Total	\$80,000,000

Other Nearby Projects in the Master Plan



Other Project Area Statistics

Estimated Current Population U.S. Census (2010), U.S. Dept. of Energy Oak Ridge National Laboratory, Land Scan (2011)	0
Percent of Population who are Low-to-Moderate Income American Community Survey (2006 - 2010)	-
Number of Severe Repetitive Loss Properties Governor's Office of Homeland Security (2015)	0



Economic Damage

Structural protection projects are evaluated by how they reduce Expected Annual Damage (EAD) for a particular area. EAD represents the average direct economic damage projected to result from storm surge flooding events, from Category 1 or greater storms, in any given year, taking into account both the expected damage and the overall frequency of such storms occurring. EAD is a summary measure of the potential damage averaged over the entire distribution of possible flood events. Damage is also summarized at various return periods (DRP), e.g., 100-year damage being the damage with a 1% chance of occurring or being exceeded in a given year. The following are the economic damage summaries for the Future Without Action (FWOA) and Future With Project (FWP) conditions, for the project as a whole (Table 2), and for each Risk Region (Table 3). EAD and DRP values are reported in millions of dollars.

Table 2: Expected Annual Damage

Year	FWOA	FWP	Difference
0	\$15 M	-	-
25	\$95 M	\$91 M	\$4 M
50	\$1,234 M	\$1,249 M	-\$16 M

Critical Infrastructure

The data in Table 1 was provided by GOHSEP and the Homeland Security Infrastructure Program (HSIP). "Protected" assets are those that otherwise flood in FWOA conditions but are protected by the project.

Table 1: Critical Infrastructure Counts

Asset Type	Protected	Total
Airport Facility	-	-
Gas Processing	-	1
Government/Military	-	-
Electric Power Substation	-	1
Liquefied Natural Gas Terminal	-	-
Louisiana Offshore Oil Port	-	-
Manufacturing/Chemical	-	3
Electric Power Plant	-	2
Port	-	-
Petroleum Pump Station	-	-
Refinery	-	-
Water and Sewer	-	2
Strategic Petroleum Reserve	-	-
Total	-	9

Table 3: Economic Damage by Return Period at Year 50

Risk Region	50 Year		100 Year		500 Year	
	FWOA	FWP	FWOA	FWP	FWOA	FWP
Assumption	\$661 M	\$666 M	\$672 M	\$676 M	\$674 M	\$679 M
St. Martin	\$365 M	\$365 M	\$368 M	\$367 M	\$370 M	\$370 M
St. Mary - Lower	\$3,990 M	\$4,097 M	\$4,196 M	\$4,179 M	\$4,238 M	\$4,231 M
St. Mary - Morgan City	\$10,461 M	\$10,599 M	\$10,779 M	\$11,007 M	\$11,566 M	\$12,193 M
Terrebonne - Lower	\$2 M	\$2 M	\$2 M	\$2 M	\$2 M	\$2 M
Total	\$15,479 M	\$15,729 M	\$16,016 M	\$16,232 M	\$16,850 M	\$17,476 M